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**AMENDMENTS TO THE CLAIMS:**

**Please cancel claim 3, without prejudice or disclaimer, and amend the claims as follows:**

1. (Currently Amended) A method of producing a crystal growth substrate, comprising:  
molding a seed substrate into a desired shape so that irregularities are provided to a sapphire growth surface of said seed substrate;  
growing a sapphire crystal on said sapphire growth surface of said seed substrate to thereby form a sapphire substrate; and  
removing said seed substrate selectively from said sapphire substrate by performing chemical etching to said seed substrate on which said sapphire substrate is formed, formed by said growing a sapphire crystal,  
wherein said irregularities comprise cavities formed periodically in said sapphire growth surface of said seed substrate during said molding a said seed substrate.
2. (Previously Presented) A method of producing a crystal growth substrate according to claim 1, wherein at least one of silicon (Si) and gallium arsenide (GaAs) is used as a material of said seed substrate.
3. (Canceled)
4. (Previously Presented) A method of producing a crystal growth substrate according to claim 1, further comprising:  
heating said sapphire substrate formed by said growing a sapphire substrate at a high temperature of not lower than about 1000°C to thereby perform phase transition of said sapphire substrate from  $\gamma$  phase to  $\alpha$  phase.
5. (Previously Presented) A method of producing a crystal growth substrate according to claim 1, wherein a shape of said cavities comprises a substantially spherical shape during said molding a seed substrate.
6. (Previously Presented) A method of producing a crystal growth substrate according to

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claim 1, wherein said cavities are arranged two-dimensionally in said sapphire growth surface of said seed substrate.

7. (Previously Presented) A method of producing a semiconductor light-emitting element, said semiconductor light-emitting element capable of emitting planar light and including a semiconductor laminated on a sapphire substrate by crystal growth, said method comprising:

molding a seed substrate into a desired shape so that irregularities are provided to a sapphire growth surface of said seed substrate;

growing a sapphire crystal on said sapphire growth surface of said seed substrate to thereby form a sapphire substrate;

growing a desired semiconductor layer as a crystal on said sapphire substrate; and

removing said seed substrate selectively from said sapphire substrate formed by the growing of the sapphire substrate.

8. (Previously Presented) A method of producing a semiconductor light-emitting element according to claim 7, further comprising:

forming an electrode, the step being provided between the growing of the semiconductor crystal and the removing of the seed substrate.

9. (Previously Presented) A method of producing a semiconductor light-emitting element according to claim 7, wherein said semiconductor layer comprises a Group III nitride compound semiconductor containing " $\text{Al}_x\text{Ga}_y\text{In}_{1-x-y}\text{N}$  ( $0 \leq x \leq 1$ ,  $0 \leq y \leq 1$ ,  $0 \leq x+y \leq 1$ )" as a main component, which may contain impurities as an additive or may be free from impurities.

10 - 11. (Canceled)

12. (Original) A method of producing a crystal growth substrate according to claim 1, wherein said seed substrate is capable of being etched more easily than sapphire ( $\text{Al}_2\text{O}_3$ ).

13. (Original) A method of producing a semiconductor light-emitting element according to claim 7, wherein said seed substrate is capable of being etched more easily than sapphire ( $\text{Al}_2\text{O}_3$ ).

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14. (Previously Presented) A method of producing a crystal growth substrate according to claim 1, wherein said growing a sapphire crystal comprises epitaxially growing a sapphire crystal by an ionized cluster beam vapor deposition and epitaxy method.

15. (Previously Presented) A method of producing a crystal growth substrate according to claim 1, wherein said sapphire crystal is grown at a growth temperature of substantially 350°C.

16. (Currently Amended) A method of producing a crystal growth substrate according to claim 1, wherein said cavities ~~comprises cavities~~ comprise substantially hemispherical convex portions.

17. (Previously Presented) A method of producing a crystal growth substrate according to claim 24, wherein said protrusions comprise convex microlenses.

18. (Previously Presented) A method of producing a crystal growth substrate according to claim 1, wherein said cavities are uniformly spaced along said sapphire growth surface.

19. (Previously Presented) A method of producing a crystal growth substrate according to claim 1, wherein said cavities are provided in an array across said sapphire growth surface.

20. (Currently Amended) A method of producing a semiconductor light-emitting element, comprising:

growing a desired semiconductor layer as a crystal on a sapphire substrate grown on a seed substrate; and

removing said seed substrate by performing chemical etching to said seed substrate on which said sapphire substrate is grown,

wherein cavities are formed periodically in a sapphire growth surface of said seed substrate.

21. (Previously Presented) A method of producing a semiconductor light emitting element according to claim 7, wherein said irregularities comprise cavities formed periodically in said

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sapphire growth surface of said seed substrate during said molding a seed substrate.

22. (Previously Presented) A method of producing a semiconductor light emitting element according to claim 21, wherein said cavities form protrusions on a surface of said sapphire substrate.

23. (Previously Presented) A method of producing a semiconductor light emitting element according to claim 22, wherein said protrusions comprise convex microlenses.

24. (Previously Presented) A method of producing a crystal growth substrate according to claim 1, wherein said cavities form protrusions on a surface of said sapphire substrate.

25. (Previously Presented) A method of producing a semiconductor light emitting element according to claim 7, where a surface of said sapphire substrate that is formed on said sapphire growth surface comprises a light-emitting surface

26. (Previously Presented) A method of producing a semiconductor light emitting element according to claim 7, wherein said removing said seed substrate is performed after said growing said semiconductor layer.

27. (Previously Presented) A method of producing a crystal growth substrate according to claim 1, wherein said cavities comprise a curved portion.